

What is claim d is:

1. A fan blade in a solid material for a gas-turbine engine, including a blade root attachable to a fan rotor disk and an opposite blade tip, wherein at least one cavity
5 starting out from a free face of the blade tip and extending in a direction of the blade root is provided in a limited blade tip portion.
2. A fan blade in accordance with Claim 1, wherein the fan blade includes several cavities and at least one of a length and a cross-sectional area of the several
10 cavities varies over the width of the fan blade.
3. A fan blade in accordance with Claim 2, wherein one of the cavities situated closer to a leading edge of the fan blade has at least one of a smaller length and a cross-sectional area than a cavity situated closer to a center of the blade.
- 15 4. A fan blade in accordance with Claim 2, wherein a cavity near a center of the blade has the greatest length.
5. A fan blade in accordance with Claim 1, wherein a cross-sectional shape of
20 the at least one cavity is at least one of essentially rectangular, oval and round.
6. A fan blade in accordance with Claim 1, wherein a longitudinal axis of the at least one cavity follows a twist of the blade.
- 25 7. A fan blade in accordance with Claim 1, wherein a cavity cross-section decreases gradually at its bottom end facing the blade root and runs out in the form of a wedge.
8. A fan blade in accordance with Claim 1, wherein the at least one cavity is pro-
30 duced by erosive material removal from a solid fan blade.
9. A fan blade in accordance with Claim 1, comprising a separately made solid blade portion and a separately made hollow blade portion which are connected together.

10. A fan blade in accordance with Claim 9, wherein the separately made hollow blade portion comprises a sheet-metal shell.
- 5 11. A fan blade in accordance with Claim 9, wherein the separately made hollow blade portion is produced from solid material by erosive material removal.
12. A fan blade in accordance with Claim 9, wherein the separately made hollow blade portion is constructed of a material that is different than that of the solid blade
10 portion.
13. A fan blade in accordance with Claim 1, wherein the blade comprises several cavities separated from each other by reinforcing ribs.
- 15 14. A fan blade in accordance with Claim 1, wherein the at least one cavity comprises a pocket initially open to a suction side of the blade and a plate joined to the blade to at least partially close the pocket.
15. A fan blade for a gas-turbine engine, comprising:
20 a substantially solid blade root portion constructed and arranged to be attachable to a fan rotor disk;
a blade tip portion opposite the blade root portion, the blade tip portion including at least one cavity starting out from a free face of the blade tip portion and extending in a direction toward the blade root portion.
- 25 16. A fan blade in accordance with Claim 15, wherein the fan blade includes several cavities and at least one of a length and a cross-sectional area of the several cavities varies over the width of the fan blade.
- 30 17. A fan blade in accordance with Claim 16, wherein one of the cavities situated closer to a leading edge of the fan blade has at least one of a smaller length and a cross-sectional area than a cavity situated closer to a center of the blade.

18. A fan blade in accordance with Claim 16, wherein a cavity near a center of the blade has the greatest length.

19. A fan blade in accordance with Claim 15, wherein a longitudinal axis of the at
5 least one cavity follows a twist of the blade.

20. A fan blade in accordance with Claim 15, wherein a cavity cross-section decreases gradually at its bottom end facing the blade root portion.

10 21. A fan blade in accordance with Claim 15, wherein the blade root portion and the blade tip portion are separate components connected together.

22. A fan blade in accordance with Claim 21, wherein the blade tip portion comprises a sheet-metal shell.

15 23. A fan blade in accordance with Claim 21, wherein the blade tip portion is constructed of a material that is different than that of the blade root portion.

20 24. A fan blade in accordance with Claim 15, wherein the blade tip portion comprises several cavities separated from each other by reinforcing ribs.

25 25. A fan blade in accordance with Claim 15, wherein the at least one cavity comprises a pocket initially open to a suction side of the blade and a plate joined to the blade to at least partially close the pocket.